Data Modernization Initiative
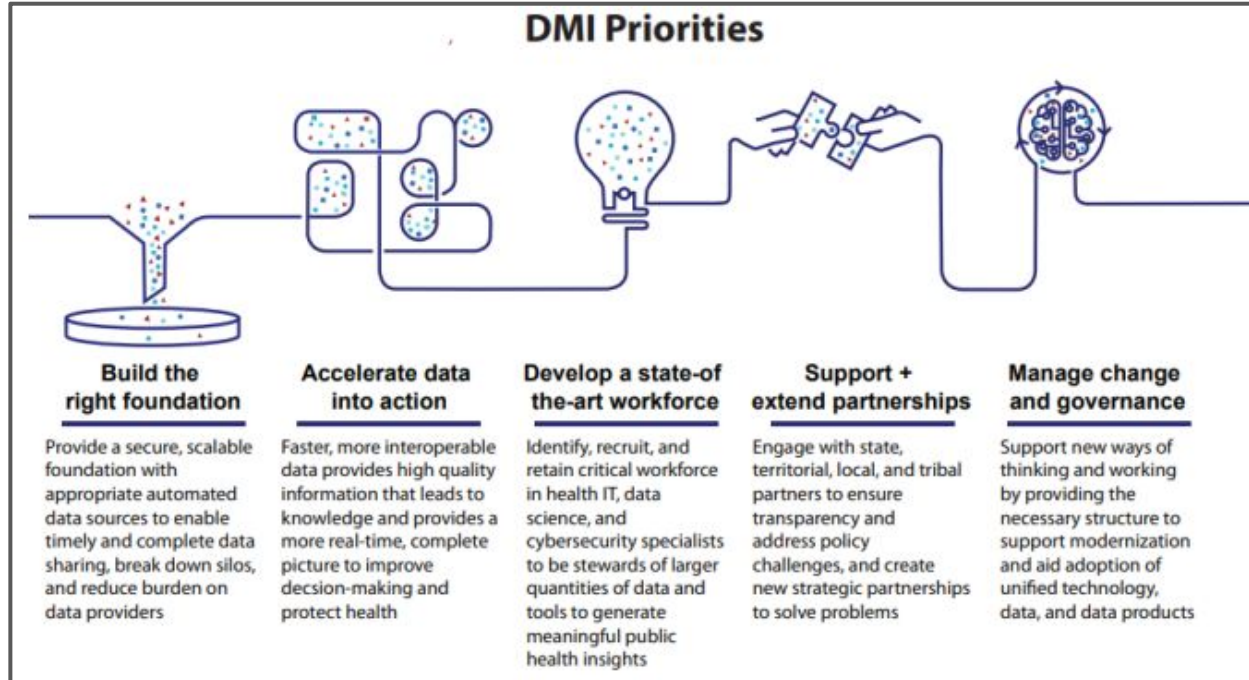
Challenges Highlighted by COVID Pandemic

- Public health information systems are antiquated, brittle, siloed, and underfunded
- Challenges include:
  - Outdated technology
  - Scalability and flexibility
  - Interoperability
  - Collecting timely, accurate, and complete data
  - Manual data collection processes
  - Data sharing among public health partners

Data must move faster than the disease

Data Modernization Initiative

National effort to create modern, integrated, and real-time public health data and surveillance that can protect us from any health threat

DMI Priorities

Build the right foundation

Provide a secure, scalable foundation with appropriate automated data sources to enable timely and complete data sharing, break down silos, and reduce burden on data providers

Accelerate data into action

Faster, more interoperable data provides high quality information that leads to knowledge and provides a more real-time, complete picture to improve decsion-making and protect health

Develop a state-of-the-art workforce

Identify, recruit, and retain critical workforce in health IT, data science, and cybersecurity specialists to be stewards of larger quantities of data and tools to generate meaningful public health insights

Support + extend partnerships

Engage with state, territorial, local, and tribal partners to ensure transparency and address policy challenges, and create new strategic partnerships to solve problems

Manage change and governance

Support new ways of thinking and working by providing the necessary structure to support modernization and aid adoption of unified technology, data, and data products

ELC Data Modernization - COVID

Tier 1: Core Data Modernization Infrastructure

Tier 2: eCR (Electronic Case Reporting) Scale Up

Tier 3: NVSS (National Vital Statistics System) Modernization

Performance period ends 7/31/2023

DOH/DHHS Strategy

- Enterprise approach to coordinating data modernization activities across the department for all information systems, diseases, and conditions
- Health Information Technology (HIT) Strategic Council oversee these activities
- Data Modernization Leads:
  - Division of Data, Systems, and Evaluation Director
  - Division of Population Health Informatics Program Manager
- Data Modernization Coordinator:
  - Reports to Division of Data, Systems, and Evaluation Director

Tier 1: Coordinate Modernization Efforts

- Needs assessment/gap analysis
  - Health information systems and services
  - Workforce capacity
- Develop a plan
  - Full data modernization plan for IT and informatics infrastructure
  - Workforce development plan

Tier 1: System Modernization

- Evaluating systems
  - Information gathering has started
    - ECIDS, IBIS, DOHMPI, CHARM
  - OVRS, UINTAH, EDEN

- Collaboration with DM LC
  - Creating a more detailed assessment tool (April 13th)
  - Review and revisit systems

- Next steps
  - Prioritizing data collection and system interoperability
  - Phase out of legacy platforms

Tier 1: Workforce Enhancement

Evaluate, Appraise, Train

Evaluate:
Focus on self-evaluation and questionnaires to set skill standards.

Appraise:
Identify skill gaps based on evaluation and establish a goal to close the gap.

Train:
Utilize specific training resources to meet the goal and reinforce necessary skills.

Tier 2: Electronic Case Reporting Scale Up

- eCR is the automated, real-time exchange of case report information between electronic health records and public health agencies
- Utah has been an early adopter of eCR
- Primary objectives:
  - Engage with healthcare organizations - awareness and compliance
  - Active onboarding and validation
  - Enhance data processing and data use
  - Targeted organizations: Local Health Departments and FQHCs

Tier 3: NVSS Modernization

- The National Vital Statistics System (NVSS) provides the most complete data on the registration of vital events – births, deaths, marriages, divorces, and fetal deaths.

- Modernization goal for NVSS: to transform the National Vital Statistics System into a tool for real-time public health surveillance.

- Mortality data - first of the vital events to be modernized.

- Primary Objective: providing data to NCHS using FHIR-based interoperability.

- Utah Vital Records Office is an early adopter in embracing FHIR technology

- Additional Activities:

  - Rewriting the electronic birth registration system, Utah Internet Application for Hospitals (UINTAH)

  - Linking birth-death records

  - Automating birth data reporting workflows